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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,581	11/26/2003	Osamu Omori	81754.0105	8614
26021	7590	03/10/2006	EXAMINER	
HOGAN & HARTSON L.L.P. 500 S. GRAND AVENUE SUITE 1900 LOS ANGELES, CA 90071-2611			MITCHELL, JAMES M	
			ART UNIT	PAPER NUMBER
			2813	

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/724,581

Applicant(s)

OMORI, OSAMU

Examiner

James M. Mitchell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to applicant's amendment filed December 5, 2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohara et al. (U.S. 5,668,033).
4. Ohara (Fig10-14, 1q) discloses:
 - (cl. 1) a method of manufacturing a semiconductor device, comprising of: (a) connecting a first substrate (33) with a second substrate (32) disposed to be stacked on the first substrate; and (b) cutting (34,35) the first substrate and the second substrate ' s simultaneously (CLM 2 of Ohara) with a single cutting tool ("saw"; Col. 12, Lines 9-10), wherein: the cutting tool includes a plurality of cutters (34, 35) disposed close to each other, having different cut widths (Fig. 1q); and the first substrate and the second substrate are cut with the cutting tool so that the first substrate and the second substrate have different cut widths, in step (b);
 - (cl.2) part of first substrate with an optical transparency (Col. 13,Lines 21-23);
 - (cl. 3) inserting the cutting tool into the first substrate and the second substrate from a side of the first substrate (Fig. 14, e.g. along same side as Fig.4B of applicant)

(cl. 4) cutting the first substrate with a first cutter (34) and cutting the second substrate with a second cutter (35); and cutting a cut width of the first substrate by the first cutter larger than cutting a cut width of the second substrate by the second cutter, in step (b) (Fig. 1q);

(cl. 5) the length of the first cutter larger than the thickness of a part which is cut, of the first substrate (Fig. 1q; length, 34 larger than substrate,33)

(cl. 6) and the length of the second cutter is larger than the thickness of a part which is cut, of the second substrate(Fig. 1q; length, 35 larger than substrate,32)

(cl. 7) the first cutter with an interval from a surface of the second substrate at the time of cutting the second substrate (Fig. 1q);

(cl. 8) forming electrode (15) on the second substrate;

(cl. 10) forming a trench ("scribe"; Fig. 17) along a cut line of the first substrate before step (b); and cutting the first substrate along the cut line in step (b) (Fig. 127-18);

(cl. 11) cutting and separating the first substrate and the second substrate into individual pieces that include a part of the first substrate and a part of the second substrate which are placed face to face and fixed to each other (Fig. 2, CLM 3 of Ohara);

(cl. 12) placing the first substrate and the second substrate face to face through a spacer; and fixing the first substrate to the second substrate through the spacer (24, 52);

(cl. 13) first and substrate bonding through an optically transparent film¹ (Col. 8, Line 39)

¹ Silicon transparent to infrared.

(cl. 14) forming a connecting part (e.g. cavity section defined by item 23) which connects a plurality of covers to each other in the first substrate; fixing a plurality of the covers to the second substrate in step (a); and cutting the connecting part in step (b) (Fig. 10-14).

5. With respect to the intended use limitation of claim 8 "which becomes an optical chip," the prior art forms the same structure as claimed. The limitation does not impart patentability, since it has been held that the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohara in combination with Glenn (U.S. 6,465,329).

8. Ohara discloses the elements in paragraphs 4 and 5 of this office action, but does not attaching a sheet to the second substrate and cutting said second substrate not to penetrate the sheet.

9. It would have been obvious to one of ordinary skill in the art to incorporate forming a film on the bottom of the substrate of Ohara in order to provide a saw film to protect and keep components in a matrix as taught by Glenn (Col. 7, Lines 16-21).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Mitchell whose telephone number is (571) 272-1931. The examiner can normally be reached on M-F 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr. can be reached on (571) 272-1702. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jmm
March 2, 2006

Carl Whitehead, Jr.
CARL WHITEHEAD, JR.
SUPERVISORY PATENT EXAMINER
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